

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P209482

Luminaire Tested: **LDSQ6B60D010 EU6B60708027 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209482
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35359)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQ6B60D010 EU6B60708027 6LBCSSQ1MMS
Description: PORTFOLIO LD6 SERIES 6" RECESSED FIXTURE WITH A SQUARE SHALLOW CAST METALLIC SILVER TRIM
MEDIUM DISTRIBUTION WITH MATTE METALLIC SILVER TRIM
D010TE
Light Source: HIGH LUMEN LED 2700 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6248.0 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

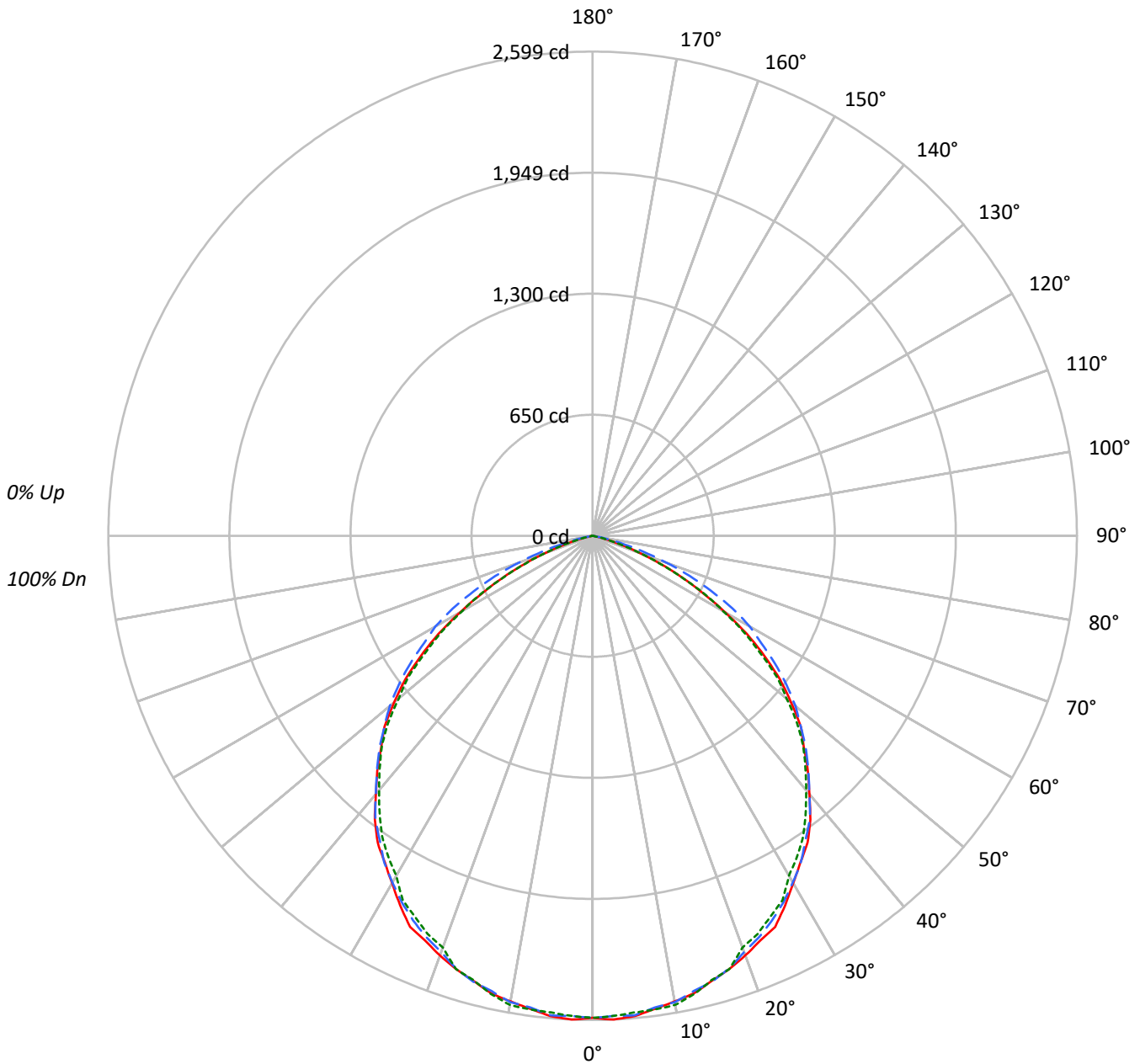
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			100
1	111	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87			87
2	102	94	88	83	99	93	87	82	89	84	80	86	82	79	83	80	77	75			75
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	64			64
4	86	75	67	60	84	73	66	60	71	64	59	69	63	58	67	62	58	56			56
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49			49
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43			43
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38			38
8	63	50	42	37	62	50	42	36	48	41	36	47	41	36	46	40	36	34			34
9	59	46	38	33	58	46	38	33	45	38	33	43	37	33	42	37	32	31			31
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28			28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	244.7	3.9
10°-20°	697.9	11.2
20°-30°	1050.2	16.8
30°-40°	1242.4	19.9
40°-50°	1239.8	19.8
50°-60°	1028.1	16.5
60°-70°	600.7	9.6
70°-80°	143.0	2.3
80°-90°	1.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1992.9	31.9
0°-40°	3235.3	51.8
0°-60°	5503.2	88.1
0°-90°	6248.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6248.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2588	2588	2588	2588	2588	
5°	2588	2574	2584	2576	2569	245
15°	2473	2472	2477	2466	2470	699
25°	2317	2290	2279	2271	2256	1059
35°	2012	1992	1992	1981	1970	1251
45°	1603	1605	1618	1601	1599	1240
55°	1126	1166	1195	1162	1099	1000
65°	531	597	702	595	527	527
75°	76	111	172	109	72	103
85°	0	0	0	0	0	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2587.9	2587.9	2587.9	2587.9	2587.9	2587.9	2587.9	2587.9	2587.9	2587.9	2587.9
2.5°	2599.3	2584.1	2595.5	2572.6	2587.9	2572.6	2576.4	2568.8	2584.1	2580.2	2576.4
5°	2587.9	2591.7	2584.1	2591.7	2580.2	2568.8	2580.2	2572.6	2549.7	2584.1	2576.4
7.5°	2561.2	2565.0	2557.3	2568.8	2561.2	2545.9	2576.4	2553.5	2549.7	2553.5	2568.8
10°	2538.3	2545.9	2542.1	2538.3	2542.1	2542.1	2534.4	2523.0	2534.4	2542.1	2538.3
12.5°	2515.4	2526.8	2519.2	2511.5	2503.9	2507.7	2515.4	2496.3	2496.3	2503.9	2526.8
15°	2473.4	2481.0	2484.8	2469.6	2469.6	2473.4	2488.6	2458.1	2473.4	2477.2	2481.0
17.5°	2439.0	2442.8	2442.8	2431.4	2439.0	2427.6	2439.0	2423.8	2439.0	2435.2	2442.8
20°	2397.0	2404.7	2397.0	2397.0	2389.4	2393.2	2393.2	2393.2	2381.8	2377.9	2385.6
22.5°	2351.2	2351.2	2343.6	2351.2	2343.6	2339.8	2358.9	2328.3	2358.9	2332.1	2355.0
25°	2316.9	2297.8	2286.3	2282.5	2297.8	2282.5	2290.2	2278.7	2286.3	2278.7	2282.5
27.5°	2236.7	2225.3	2221.5	2225.3	2225.3	2221.5	2236.7	2194.7	2221.5	2217.6	2217.6
30°	2152.8	2152.8	2160.4	2152.8	2160.4	2148.9	2164.2	2129.8	2152.8	2148.9	2152.8
32.5°	2076.4	2080.2	2080.2	2087.9	2076.4	2080.2	2080.2	2068.8	2076.4	2080.2	2072.6
35°	2011.5	1992.4	1992.4	1992.4	1992.4	1992.4	2000.1	1988.6	2000.1	1992.4	1992.4
37.5°	1919.9	1900.8	1900.8	1897.0	1916.1	1904.6	1923.7	1908.5	1908.5	1916.1	1916.1
40°	1809.2	1816.9	1805.4	1820.7	1816.9	1801.6	1835.9	1813.0	1828.3	1809.2	1824.5
42.5°	1710.0	1713.8	1710.0	1706.2	1721.4	1717.6	1732.9	1717.6	1713.8	1713.8	1740.5
45°	1603.1	1603.1	1603.1	1614.6	1603.1	1606.9	1622.2	1614.6	1622.2	1618.4	1645.1
47.5°	1515.3	1496.2	1492.4	1515.3	1511.5	1515.3	1515.3	1519.1	1523.0	1515.3	1526.8
50°	1389.4	1381.7	1381.7	1385.5	1389.4	1397.0	1408.4	1416.1	1408.4	1419.9	1423.7
52.5°	1267.2	1259.6	1263.4	1278.7	1286.3	1282.5	1301.6	1305.4	1301.6	1309.2	1309.2
55°	1126.0	1118.4	1129.8	1148.9	1160.3	1171.8	1190.9	1175.6	1190.9	1194.7	1198.5
57.5°	981.0	977.1	981.0	1000.0	1011.5	1038.2	1068.7	1068.7	1084.0	1072.6	1084.0
60°	820.6	820.6	835.9	847.4	877.9	897.0	927.5	942.8	958.1	973.3	965.7
62.5°	668.0	671.8	683.2	709.9	729.0	755.8	790.1	805.4	832.1	847.4	839.7
65°	530.6	530.6	538.2	561.1	580.2	614.5	645.1	679.4	694.7	702.3	706.1
67.5°	397.0	393.1	408.4	423.7	442.8	477.1	511.5	530.6	557.3	564.9	561.1
70°	267.2	271.0	278.6	293.9	316.8	343.5	381.7	397.0	412.2	419.9	412.2
72.5°	167.9	167.9	171.8	187.0	202.3	221.4	248.1	263.4	282.5	286.3	278.6
75°	76.3	76.3	84.0	91.6	103.1	118.3	137.4	148.9	160.3	171.8	171.8
77.5°	15.3	19.1	22.9	22.9	30.5	42.0	53.4	64.9	76.3	76.3	76.3
80°	3.8	3.8	3.8	3.8	3.8	3.8	7.6	11.5	19.1	19.1	19.1
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2587.9	2587.9	2587.9	2587.9	2587.9	2587.9	2587.9	2587.9
2.5°	2587.9	2610.8	2587.9	2576.4	2591.7	2587.9	2576.4	2580.2
5°	2576.4	2584.1	2591.7	2561.2	2580.2	2584.1	2576.4	2568.8
7.5°	2565.0	2568.8	2565.0	2557.3	2557.3	2557.3	2565.0	2565.0
10°	2561.2	2549.7	2530.6	2519.2	2530.6	2530.6	2526.8	2557.3
12.5°	2511.5	2526.8	2515.4	2492.5	2515.4	2511.5	2511.5	2519.2
15°	2473.4	2473.4	2481.0	2450.5	2465.7	2461.9	2461.9	2469.6
17.5°	2435.2	2435.2	2431.4	2423.8	2419.9	2431.4	2419.9	2439.0
20°	2381.8	2389.4	2412.3	2374.1	2385.6	2374.1	2374.1	2351.2
22.5°	2316.9	2355.0	2336.0	2332.1	2328.3	2332.1	2339.8	2313.1
25°	2274.9	2274.9	2282.5	2259.6	2259.6	2267.3	2263.4	2255.8
27.5°	2217.6	2213.8	2210.0	2202.4	2221.5	2206.2	2206.2	2206.2
30°	2137.5	2148.9	2145.1	2126.0	2148.9	2141.3	2129.8	2106.9
32.5°	2068.8	2084.0	2061.1	2057.3	2053.5	2057.3	2061.1	2042.1
35°	1984.8	1988.6	1988.6	1973.4	1977.2	1973.4	1965.7	1969.5
37.5°	1908.5	1904.6	1885.6	1877.9	1881.7	1881.7	1885.6	1877.9
40°	1801.6	1813.0	1813.0	1786.3	1794.0	1786.3	1786.3	1782.5
42.5°	1713.8	1717.6	1706.2	1694.7	1694.7	1690.9	1683.3	1690.9
45°	1622.2	1618.4	1606.9	1595.5	1595.5	1591.7	1584.0	1599.3
47.5°	1519.1	1511.5	1507.7	1492.4	1492.4	1469.5	1473.3	1488.6
50°	1416.1	1408.4	1393.2	1385.5	1374.1	1362.6	1358.8	1358.8
52.5°	1293.9	1293.9	1278.7	1263.4	1259.6	1252.0	1244.3	1248.1
55°	1187.1	1187.1	1175.6	1148.9	1133.6	1114.5	1103.1	1099.3
57.5°	1064.9	1057.3	1034.4	1003.9	988.6	973.3	961.9	961.9
60°	942.8	923.7	900.8	874.1	847.4	820.6	813.0	809.2
62.5°	809.2	790.1	748.1	717.6	698.5	683.2	668.0	679.4
65°	675.6	648.9	610.7	580.2	561.1	538.2	526.7	526.7
67.5°	534.4	507.7	469.5	438.9	419.9	404.6	389.3	389.3
70°	393.1	374.1	339.7	313.0	297.7	274.8	271.0	271.0
72.5°	267.2	244.3	217.6	198.5	183.2	167.9	160.3	156.5
75°	148.9	133.6	114.5	103.1	87.8	80.2	72.5	72.5
77.5°	61.1	49.6	38.2	30.5	22.9	19.1	15.3	19.1
80°	11.5	7.6	3.8	3.8	3.8	3.8	3.8	3.8
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°









(END OF REPORT)